**Work Order:** 1101090  
1010 East Bunkhouse  

**Client:** Wrangell St. Elias National Park  

**Report Date:** March 16, 2010  

**Released by:** Deanna Crump  
2010.03.16  
16:52:26  
-08'00'

Enclosed are the analytical results associated with the above work order. If you have any questions regarding this report, or if we can be of any other assistance, please contact your SGS Project Manager at 907-562-2343. All work is provided under SGS general terms and conditions (<http://www.sgs.com/terms_and_conditions.htm>), unless other written agreements have been accepted by both parties.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & UST-005 (CS) for ADEC and AK100001 for NELAP (RCRA methods: 1020A, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035B, 6010B, 6020, 7470A, 7471B, 8021B, 8081B, 8082A, 8260B, 8270D, 8270D-SIM, 9040B, 9045C, 9056A, 9060A, AK101 and AK102/103). Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, the National Environmental Laboratory Accreditation Program and other regulatory authorities. The following descriptors or qualifiers may be found in your report:

- * The analyte has exceeded allowable regulatory or control limits.
- ! Surrogate out of control limits.
- B indicates the analyte is found in a blank associated with the sample.
- CCV Continuing Calibration Verification
- CL Control Limit
- D The analyte concentration is the result of a dilution.
- DF Dilution Factor
- DL Detection Limit (i.e., maximum method detection limit)
- E The analyte result is above the calibrated range.
- F Indicates value that is greater than or equal to the DL
- GT Greater Than
- ICC Initial Calibration Verification
- J The quantitation is an estimation.
- JL The analyte was positively identified, but the quantitation is a low estimation.
- LCS(D) Laboratory Control Spike (Duplicate)
- LOD Limit of Detection (i.e., 2xDL)
- LOQ Limit of Quantitation (i.e., reporting or practical quantitation limit)
- LT Less Than
- M A matrix effect was present.
- MB Method Blank
- MS(D) Matrix Spike (Duplicate)
- ND Indicates the analyte is not detected.
- Q QC parameter out of acceptance range.
- R Rejected
- RPD Relative Percent Difference
- U Indicates the analyte was analyzed for but not detected.

**Note:** Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content.  
All DRO/RKO analyses are integrated per SOP.
### Sample Remarks:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Results</th>
<th>LOQ</th>
<th>Units</th>
<th>Method</th>
<th>Container ID</th>
<th>Allowable Limits</th>
<th>Prep Date</th>
<th>Analysis Date</th>
<th>Init</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metals by ICP/MS</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cadmium</td>
<td>1.36 U</td>
<td>1.36</td>
<td>mg/Kg</td>
<td>SW6020</td>
<td>A</td>
<td></td>
<td>03/16/10</td>
<td>03/16/10</td>
<td>KDC</td>
</tr>
<tr>
<td>Lead</td>
<td>1060</td>
<td>1.36</td>
<td>mg/Kg</td>
<td>SW6020</td>
<td>A</td>
<td></td>
<td>03/16/10</td>
<td>03/16/10</td>
<td>KDC</td>
</tr>
<tr>
<td>Sample</td>
<td>I.D.</td>
<td>Type</td>
<td>Media</td>
<td>Collected</td>
<td>Sample Location</td>
<td>Air</td>
<td>Water</td>
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<td>3-11 1000h</td>
<td>East Bunkhouse</td>
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</tr>
</tbody>
</table>

**Analysis Requested**

- LEAD
- Cadmium

**Agency**
DOI-NPS Location: NRE - Kennecott NHL

**Relinquished by:**

**Received by:**

**POIS#**
Date: 3-11-10 Time: 10:30 AM

**Task order number**
Rush 24 hour

**Turn Around Time**
Routine

**Comments:**
24 hour turn around, results to be faxed (907) 322-7216. Invoices to be paid by credit card.
**SAMPLE RECEIPT FORM**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**TAT (circle one):** Standard  
- or- Rush

**Received Date:** 3/15/10

**Received Time:** 17:30

**Cooler ID**

**Temperature**

**Measured with**

- Therm #

**Delivery method (circle all that apply):**
- Client  
- Alert Courier / Lynden / SGS
- UPS / FedEx / USPS / DHL / Carlile
- AkAir Goldstreak / NAC / ERA / PenAir
- Other:

**Additional Sample Remarks: (if applicable)**
- Extra Sample Volume?
- Limited Sample Volume?
- Multi-Incremental Samples?
- Lab-filtered for dissolved
- Ref Lab required for
- Foreign Soil?

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**This section must be filled out for DoD projects (USACE, Navy, AFCEE):**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

- Is received temperature ≤6°C?
- Was pH verified upon receipt?
- Were containers ice-free? Notify PM immediately if any in samples.
- If some cooler temperatures are non-compliant, see form FS-0029 (attached) for samples/analyses affected.
- Was there an airbill? (if "yes," see attached)
- Was cooler sealed with custody seals & were they intact?
- # / where:
- Was there a COC with cooler?
- Was COC sealed in plastic bag & taped inside lid of cooler?
- Was the COC filled out properly? Did labels correspond?
- Did the COC indicate USACE / Navy / AFCEE project?
- Samples were packed to prevent breakage with (circle one):
  - Bubble Wrap
  - Vermiculite
  - Other (specify):
- Were all samples sealed in separate plastic bags?
- Were all VOCs free of headspace and/or MeOH preserved?
- Were correct container / sample sizes submitted?
- Was the PM notified of arrival so they can send
  - Sample Receipt Acknowledgement to client?

**Cooler ID**

**Cooler Temp °C**

**Change Order Required?**

- Yes  
- No

**Notes:**

*Analysis is Lead and Cadmium in Print Ale*

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**Completed by (sign):** Amy  
**(print):** Amy Ard

**Login proof:**

- Self-check completed  
- Peer-reviewer’s initials [PAT]